

Experience and Background Information

Vance Hall - President and Founder

Previous to founding UDRI in 1995, Mr. Hall worked as Manager of Load Research and Demand Side Management for Utility Translation Systems (now part of Itron) in Raleigh, North Carolina for 3 years. Before joining UTS, Mr. Hall was Load Research Manager at Texas Utilities (now TXU) in Dallas, Texas for 6 years, and in executive management at Iowa Electric Power and Light (now part of Alliant Utilities) in Cedar Rapids, Iowa for 22 years.

Mr. Hall is an expert in interval data retrieval systems and load research/load profiling program design and analysis. He also has significant industry experience in automated meter reading systems (AMR), utility billing administration, load control and real-time pricing systems, generation and transmission planning and load forecasting. Mr. Hall provides senior level management and guidance to UDRI, and actively participates in the company's marketing efforts.

Rusty McCloud – Vice President of Operations

Before joining UDRI in November of 1997, Mr. McCloud spent over 20 years in various positions at Texas Utilities (now TXU) in Dallas, Texas, including overhaul scheduling, generating unit performance data collection and analysis, load research, interval data collection and large power billing. Mr. McCloud received a BS degree in Civil Engineering from Texas A&M University and is a registered professional engineer in the state of Texas.

Mr. McCloud designed, configured and installed the networked MV-90 data collection system in use at UDRI's Arlington, Texas facility. He currently supervises the daily operation of all data collection systems and data presentation systems as well as the computer hardware associated with all systems at UDRI. Mr. McCloud also programs software systems and has used his abilities as a programmer to automate and augment many areas of interval data collection, load research, real-time pricing, load control, remote communications, and integration and automation of computer systems.

Gary Crider - Vice President of Production Development

Before joining UDRI in January, 1998, Mr. Crider worked for Texas Utilities (TXU) in Dallas, Texas for 28 years, gaining extensive knowledge in data processing. Mr. Crider has experience in the areas of programming, analysis, security administration, technical support, technical planning, IT management, and Rate Department operations. Mr. Crider received a BBA degree from the University of Texas at Arlington.

Most of Mr. Crider's industry experience in programming and analysis is in the area of Employee Information Systems, Customer Information Systems, and

special rates billing applications involving interval data. Mr. Crider's programming experience is broad based, having programmed in over 15 different computer languages.

He currently supervises the computer programming staff at UDRI and is the chief programmer on UDRI's PowerPriceTM suite of software products. He designed, programmed, and implemented the PowerPriceTM Billing System.

Mike Keith - Manager of Marketing

Prior to joining UDRI, Mr. Keith managed load research/load profiling programs at two different utilities - East Kentucky Power Cooperative in Winchester, Kentucky and Southwestern Electric Power Cooperative in Shreveport, Louisiana. Mr. Keith's load research responsibilities included project evaluation, budgeting, and reporting to executive staff as well as utility commissions. Mr. Keith's tasks included sample design, selection, and analysis. Mr. Keith received a BS degree in Computer Science from Louisiana Tech University.

Since joining UDRI in March of 1998, Mr. Keith's load profiling expertise has expanded to include consulting and project management, not only in the US but internationally as well. Mr. Keith's consulting clients include the Electric Power Research Institute (EPRI), Anderson Consulting (now Accenture), Louisville Gas and Electric (LG&E), and Texas-New Mexico Power Company (TNMP). Mr. Keith also provides marketing and sales expertise to UDRI's line of products and services. These products and services are sold directly to utilities, energy service providers, retail electric providers, the end consumer, and other energy organizations. Over the years, Mr. Keith has presented papers to the AEIC Load Research Conference, Western Load Research Conference, MV-90 Users Group Conference, NRECA annual meetings, and other forums.

Jeff Hill - Consultant

Prior to joining UDRI, Mr. Hill was Vice President of Mainlander Services Corporation in Portland, Oregon, a regional mortgage-banking firm. Mr. Hill is also an attorney and was in the private practice of law for twelve years before moving full time into administration. He holds a BBA-Finance degree from the University of Texas at Arlington, an accounting degree from Portland State University, and a JD degree from the University of Houston School of Law.

Mr. Hill's background is in the administration of growing companies. His responsibilities at UDRI include the management of all accounting, finance, legal, and credit activities of the company; and supervision of the human resources function, including employee benefit programs and pension plan administration.

Krege Bailey - Technical Analyst

Mr. Bailey focuses on data collection and data presentation using MV-90 and PowerPriceTM RTP as well as customer support of those products. He also has experience in PC hardware and software installation, operation, and training.

Prior to joining UDRI in May of 1996, Mr. Bailey worked for Westcott Industries in Carrolton, Texas.

Norma Jackson - Operations Analyst

Ms. Jackson is responsible for data collection, data presentation, and billing functions of the PowerPriceTM and MV-90 software products at UDRI as well as customer support of those products. Ms. Jackson has many years of experience in operation translation systems going back to the Westinghouse WLT-40.

Ms. Jackson had previously worked at Texas Utilities (now TXU) for 32 years. Ms. Jackson's work at Texas Utilities included customer service, credit, large customer billing, keypunch, and load research.

Karen Hall

Prior to joining UDRI, Ms. Hall worked at the Foster & Sear Law Firm, as an accounting clerk. Previously, Ms. Hall has held various positions focusing on data entry, customer service, and accounting.

Ms. Hall is involved in the company's billing service bureau and MV-90 systems, focusing on customer setups, data analysis, and problem resolution.

Julie Sirowy - Operations Analyst

Ms. Sirowy is responsible for data collection, data presentation and billing functions of the PowerPriceTM and MV-90 software products at UDRI as well as customer support of those products. Ms. Sirowy has many years' experience building class level load shapes from sampled data for customers using the MV-90 software. Ms. Sirowy's extensive experience includes operating translation systems, as well as the Westinghouse WLT-40.

Prior to joining UDRI, Ms. Sirowy worked for IES Industries in Cedar Rapids, Iowa for 18 years. Her work at IES included load research, data collection, special billing, customer service, and recorder metering service assistance.

Edward Anderson - Software Engineer

Mr. Anderson specializes in the development of Windows and CGI Internet applications. He holds a BA degree in Linguistics from Oklahoma University. He did elective work in computer science at Oklahoma and received programming certification from Marquette University.

Mr. Anderson is involved in software development at UDRI. He was instrumental in the conversion of PowerPriceTM RTP from a 16-bit system to a 32-bit application, and its subsequent continued development. He currently develops CGI applications that control access to the company's databases from JavaScript Internet applications.

<u>John Nguyen – Software Engineer</u>

Mr. Nguyen has extensive experience in PowerPriceTM RTP and the company's internet presentation software. He holds a BS degree in Computer Science with a minor in Electronics Engineering from Metropolitan State College (Denver).

Mr. Nguyen is involved in software development at UDRI, using primarily C++ and Javascript in the company's applications. Mr. Nguyen was significantly involved in converting PowerPriceTM RTP from a 16-bit to a 32-bit application and is now involved in Internet development activities.

Ruby Crider - Operations Analyst

Ms. Crider worked for nine years at Practitioners Publishing Company, Inc. before joining UDRI. While there, she was responsible for updating CPA manuals for print and then converting the electronic files into software for CD-ROM and the internet. She has extensive experience and training in customer service and various computer applications.

Ms. Crider is currently involved in UDRI's billing service bureau and MV-90 systems, focusing on customer setups, data analysis, and problem resolution.

Stephanie Mullen - Marketing Analyst

Ms. Mullen provides support for UDRI in marketing and contract administration. Her responsibilities include coordinating information for responding to requests for proposals (RFP) from prospective clients, review of client billing, interfacing with operations and accounting, and maintaining the company's contracts and agreements. In addition, Ms. Mullen assists in advertising and trade show efforts.

Prior to joining UDRI, Ms. Mullen performed ERCOT Settlement Accounting

functions for Tenaska Power Services. Ms. Mullen also worked for Texas New-Mexico Power Company (TNMP) for 11 years. Her responsibilities at TNMP included the administration of purchased power and industrial customer contracts, validating and maintaining load data, and various aspects of regulatory filings. Ms. Mullen has a BBA degree in Accounting from the University of Texas at Arlington.

Richard Guerra - Technical Specialist - Marketing

Richard Guerra is responsible for managing the research and promotion of new AMR hardware relating to data retrieval, communications, and metering for UDRI clients as well assisting on all marketing and sales aspects of the company.

Before joining UDRI, Richard was the Director of Field Services for MainStreet Networks. He was responsible for the development of deployment strategies and tactics of the MainStreet Internet Gateway and related products. He was also responsible for the development of the "Safety Assurance Program" and "Deployment Training Program" for field personnel.

Richard developed his skills in the electric metering and utility automation areas while working at Central and SouthWest Corporation. The last 5 years at CSWC were as the Manager of Field Operations, where he was responsible for the deployment of a fixed wireless AMR network, a fully automated SCADA system for electric, water, and waste water, and a power line carrier solution for commercial accounts in Georgetown Texas. He also managed a Demand Side Management (DSM) project utilizing a hybrid fiber coaxial cable network in Laredo Texas, and provided consulting for the California deregulated market on installation and deployment processes for Meter Service Providers (MSP), as well as training for Meter Data Management Agent (MDMA) analysts on metering and data translation formulas and calculations.

Richard holds an Associates degree in Electronic Engineering Technology.

Arthur Goehring – Operations Analyst

Before joining UDRI in January 2002, Mr. Goehring spent 16 years in various positions with Central and South West Corporation (CSW) (now part of AEP). Mr. Goehring has worked with the MV-90 systems since 1988 and prior to that had worked with the Westinghouse WLT-40 system.

Most recently, Mr. Goehring spent the last 4 years as a senior consultant with C3 Communications/Datapult™ in Austin, Texas responsible for the design, maintenance, and daily operations of the MV-90 and MV-COMM systems. He also played an integral role in the daily operations of C3's California MDMA and Arizona MRSP business lines. Mr. Goehring brings to UDRI expertise in data collection, data analysis, metering, data presentation, load research, technical

analysis, customer service, C&I billing, real-time pricing, regulatory affairs, demand-side management, consulting, and project management.

Mr. Goehring has presented papers at the MV-90 Users Group Conference, National Meter Reading Conference and other forums. He has served on numerous committees at the MV-90 Users Group Conference and currently chairs the Equipment and Systems Interface Committee.

Mr. Goehring holds a BA degree from Corpus Christi State University (now Texas A & M University-Corpus Christi). He has also completed graduate coursework towards MS and MBA degrees.

Applied Metering Technologies Inc. Espicyse Metering Experience

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Applied Metering Technologies, Inc Experience and Background

Description of the AMT's electric meter installation, maintenance, repair and removal experience:

In general, Applied Metering Technologies staff is comprised completely of former utility meter services engineers and technicians. All of AMT's journeymen meter technicians and engineers have been hired from Southern California Edison Company, Pacific Gas and Electric Company and Commonwealth Edison Company. Technicians average approximately 21 years of metering experience including journeyman field calibration, installation, troubleshooting, maintenance and inspection of meters, current transformers, wiring, and associated recorders, reactiformers and other metering equipment. The only AMT staff that does not come from the electric utility background is our clerical staff and our entry level Class 1 Technician. Our former ComEd technician comes to AMT with 34 years of experience in the utility and has a background in all facets of metering including a meter training instructor. He is more than qualified for this position. As the work load picks up, AMT expects to hire journeymen meter technicians from the utilities in the Illinois area. Entry level personnel will also be hired as work in the residential market materializes.

The Management Team of AMT

The president of AMT, Mario Natividad, has 29 years of SCE experience where he started as a Meter Shop Testman Helper. He advanced through various technician positions within the meter services organization to the position of Manager of Electrical Metering Services where he remained for 7 years. In this capacity he managed four groups: a) the Meter Shop, b) the Distribution Transformer Repair shop, c) the Field Meter Test Section of approximately 190 mater testmen and supervisors, and d) the Meter Engineering Support Services organization. He is published in the EEI Metering & Service Committee's Handbook for Electricity Metering, 9th Edition, page v. He was actively involved in the EEI Meter and Service Committee and the publishing of this technical handbook which serves to identify meter principles and practices. In addition to serving as the 2nd Vice-Chairman of the EEI Meter & Service Committee, he was nominated and became a member of the AEIC Meter & Service Committee. A nomination to this committee can only be made by existing members of this committee and is reserved for those utility metering individuals who have demonstrated leadership and innovation in the utility metering field. He was selected by SCE to represent the utility on EPRI's Advanced Metering Target Group and helped start up the Southern California

Applied Metering Technologies, Inc. Experience and Background

Meter Users Group – a group of meter engineers and management individuals from municipalities and utilities in Southern California.

Our Lead Technician and Field Engineer, John Westberg, has approximately 18 years of journeyman meter technician, meter supervisory, and meter engineering experience. After a successful stint as a journeyman field meter testman, he became a meter test analyst and eventually supervised SCE's group which automated their field meter test activities. Following 15 years at SCE in the metering field, he retired and was subsequently hired by IBM as a contractor working on the development of PG&E's meter customer information system. He performed in this capacity right up to being hired by AMT in October, 1997. Mr. Westberg will be actively involved in providing technical support for our Illinois field technician on various meter situations and configurations our Class 3 Technician may encounter.

AMT's meter engineer, Johnell Holly, has approximately 21 years of experience in the positions of journeyman meter technician, meter instructor, and meter engineer. During his SCE service as an engineer he was responsible for maintenance, updates, and technical support of all of the meter software used to program SCE's TOU meters. He was also a project manager for the load survey meter/recorder trouble reports, and was instrumental in the coordination required to install many of SCE's load research metering projects. He later became the lead engineer for SCE's automated meter reading (AMR) effort. He has developed numerous training modules for field technicians on laptop computer use for programming and reading meters optically in the field. Mr. Holly will be our Illinois field technician's main office support for technical assistance on computer software, programming meters, and meter communications issues.

Our Meter Technician Staff

The staff of technicians hired by AMT have been hand selected. Since the President of AMT was also a recent Manager of Electrical Metering Services at SCE, he was intimately aware of the work quality and reviewed the performance appraisals of each of the technicians. Not all former SCE technicians were recruited. Those that were low performers or low in quality work, were purposely not recruited, and the resulting staff is a cadre of high performers. AMT has followed this same practice of hiring quality meter technicians from PG&E and ComEd. Indeed, if an existing SCE, PG&E, or ComEd metering person were questioned regarding the quality of technician that AMT has, the response would come with high regards.

Applied Metering Technologies, Inc Experience and Background

The background of our technicians includes all facets of metering experience. Each of our technicians is quite familiar with Time-of-Use metering, cogeneration metering, interruptible accounts, interval data recorders, meter software residing on laptop computers used for programming and reading meters, load survey applications, energy diversion detection, routine meter calibration, meter vectoring and their application, meter formulas, and safe work practices.

Our technicians also have considerable experience on the many different types of utility meters. They can test, install, perform maintenance, and troubleshoot ABB, General Electric, Schlumberger Industries, and Siemens meters and all other traditional utility type meters. Their experience includes thorough familiarity with traditional electromechanical meters, solid-state meters, and bench testing meters in the shop. They have a wealth of knowledge on which meters perform best, what problems develop over time on older vintage meters, and the many varied ways some customers have found to divert electricity.

Six of our staff conducted formal training classes at Southern California Edison Company and ComEd. These classes consisted of single phase and polyphase meter theory, hands on meter troubleshooting, and field meter testing to the present meter testmen at SCE and ComEd. This included classes to newly hired meter testmen ("off the street") as well as classes to journeyman testmen on advanced meter theory and complex and primary metering. Classes have also been given by our staff to meter readers, field service representatives, planners, and marketing reps on metering principles and processes in general.

Applied Metering Technologies, Inc Experience and Background

Direct Access Meter Installation Experience

Applied Metering Technologies, Inc. was one of the first Meter Service Providers in California to set meters for Direct Access customers and has been doing so regularly since January 1998.

- a) The first to install a Direct Access meter in California.
- b) The first to install meters in all three utility's service territories.
- c) The first to meet the 50 Joint Meets with SCE and obtain their approval for meter services.

As for references regarding the quality and professionalism of our technicians and our capabilities, the Commission could solicit comments from:

PG&E	Tim Vahlstrom	Manager	415.973.1084
PG&E	Young Nguyen	Meter Engineer	415.973.1686
SDG&E	Steve Grady	Direct Access Project Lead	858.654.8242
SCE	Kit Maughan	Mgr. Electric Meter Services	714.895.0427
SCE	Deepak Nanda	Mgr, Shop Services & Instrum.	714.895.0420

Mario A. Natividad

1154 Guinea Drive Whittier, California 90601 (818)968-6872

OBJECTIVE

To utilize the skills acquired in the electric utility metering field to successfully manage a field meter services organization in a restructured electric industry outside of the utility environment.

PROFESSIONAL EMPLOYMENT

October, 1997 to Present FOUNDER & CEO, APPLIED METERING TECHNOLOGIES INC. Responsible for the daily operations, marketing, and management of a meter service provider business in the deregulated electric utility business. Successfully positioned the Company as a premier meter organization for many of the nation's key energy service providers.

June, 1990 to September, 1997 MANAGER, SHOP SERVICES & REPAIRS, SOUTHERN CALIFORNIA EDISON CO. Responsible for the accuracy and reliability of Southern California Edison's 4.2 million meters. Manage up to 200 personnel in the Electrical Metering Services organization consisting of a 40,000 square foot distribution transformer repair shop, a 4,500 square foot meter shop, meter inventory, meter engineering and design group and a large field meter test group deployed at 26 service centers

April, 1987 to May, 1990 DIVISION TEST SUPERVISOR, SOUTHERN CALIFORNIA EDISON CO. Responsible for all field meter test activities in the Edison system with approximately 160 IBEW meter technicians and supervisory personnel at 26 service centers. Includes training, safety and the management of an \$8 million budget.

March, 1983 to April, 1987 DATA TRANSLATION & ANALYSIS SUPERVISOR, SOUTHERN CALIFORNIA EDISON CO. Responsible for processing approximately \$3 million daily of TOU information for the timely billing of SCE's large customers and for load survey and cogeneration accounts. Initiated the successful implementation of the utilization of Datastar recorders as the SCE standard. Managed a staff of nine personnel and three WLT-40 translation systems.

December, 1976 to March, 1983 LABORATORY SUPERVISOR/ ANALYST, SOUTHERN CALIFORNIA EDISON CO. Responsible for special project evaluations on new energy management devices. First line supervisor for 12 IBEW laboratory technicians. As Data Acquisition Analyst, significant achievements included the design and implementation of the existing data base management system for load survey data and rewrite of the interval data estimating software (now used as a standard on the UTS MV-90 system).

August, 1968 to January, 1986 VARIOUS TECHNICIAN POSITIONS, SOUTHERN CALIFORNIA EDISON CO. Held various jobs as laboratory technician, relay testman, and meter testman working in the shop and at field locations. Work included the testing and repair of watthour meters, recorders, protective relays, and various electrical test instruments.

Mario A. Natividad

1154 Guinea Drive Whittier, California 90601 (818)968-6872

(cont.)

PROFESSIONAL EMPLOYMENT (cont.)

March, 1967 to June, 1968 SUPPLEMENTAL CUSTOMER ENGINEER, IBM. Responsible for wiring updates and maintenance on Mod 360/30 mainframe computers,

tape drives, printers and peripheral equipment.

SPECIAL INTERESTS

Member, 1996 - 1997

Electric Power Research Institute, (EPRI) Advanced Metering Target Group

2nd Vice-Chairman and past Chairman of the Management Practices Subcommittee, 1990 - 1994

Edison Electric Institute (EEI) Meter & Service Committee

Member (Nominated by Duquesne Light Co. for

Associated Edison Illuminating Companies (AEIC) Meter & Service Committee

leadership in the metering field), 1994 - 1995

Pacific Coast Electrical Association (PCEA)

Tournament Chairman, 1988 - 1997

SCE/SSID Golf Committee

President, 1978 - 1981

Member 1990 - 1993

SCE Rod and Gun Club

Campaigner

Committee to Reelect Al Natividad (father), Mayor of Pico Rivera (successfully re-elected)

Member1989 - 1993

Professional Hispanics in Energy (PHIE)

EDUCATION

Senior standing, Business Mgm't curriculum with 10 classes remaining for Bachelor of Science

Associate of Arts Degree, 1982

Electronics Graduate

California Polytechnic University, Pomona

(through 1985)

Mount San Antonio College, Walnut, CA Don Bosco Technical Institute, Rosemead, CA

PERSONAL

Married: 4 children

Age: 50

Health: Excellent. I have only missed one day of work in the last 6 years.

HOBBIES

Golf, fishing, reading, home projects.

Proficient in the use of computers and MicroSoft software.

William R. Gierke Chicago, IL 60641

OBJECTIVE: Meter technician

QUALIFICATIONS

- Thirty-four years metering experience.
- One year as a meter reader.
- Ten years as a single phase meter person.
- Nine years as a power meter person.
- Four years as a meter analyzer.
- Two years as a metering instructor.
- Two years as a meter supervisor.
- · Six years as a principal meter analyzer.

I am experienced in most meter work as well as some programming, I also have experience in telephone based metering both cellular and land line installations.

EMPLOYMENT

1966-2000 Principal Meter Analyzer. Com. Ed.

Retired June, 2000.



Long Beach, California 90806

OBJECTIVE

To use my skills and knowledge to meet the responsibilities of a Metering Engineer in the performance of setting up metering equipment, software, training aides and procedures for technicians, etc. To be the liaison between the technicians and the meter manufacturers for support information. Additionally, develop and or design sub metering installations.

QUALIFICATIONS

Nineteen years experience in all aspects of data acquisition, project management and electrical metering. Ability to organize and manage diverse projects including planning and scheduling, organizing teams, researching data and equipment requirements, getting appropriate permits, analyzing economics, developing procedures and making decisions. I am proficient in the use of PC's, MacIntosh computers and the Internet. I have designed, developed and taught computer operations and warehousing management.

ACHIEVEMENTS

- Supported the setup of 17 offices in the Long Beach District.
- ♦ Supervised the District Office in Long Beach during tax season.
- Remote Electronic Receiver Transmitter Demonstrated feasibility of remote meter reading
- ◆ Constructed Personal Computer Demonstrated cost effectiveness of upgrading from 8088 through 80586 personal computers
- Published specifications for a hand held computer Demonstrated knowledge of software and system requirements
- ♦ Management of Automated Logistics Material Management Course Established my instructional abilities and management training

EXPERIENCE

July 1996 -April 1997 I performed duties of support specialist for the Long Beach district during pre - tax season setup. During tax season I was the Office supervisor for the Long Beach District Office.

November 1977-July 1996 Engineer I within SCE - I provide support and direction for Load Survey and Special metering projects and I assist with maintenance of Time-of-Use metering systems. I ensure proper accounting is used to capture accurately the cost of projects and maintenance activities. Analyze meter test reports and determine the corrective action associated with metering errors, energy theft, and safety irregularities. Assisted and performed training and evaluation. Service, test and install solid-state three phase, single phase, time of use and load survey metering equipment.

January	1973-
Marzamh	Ar 1077

Journeyman Intercommunication and Sound Technician, Hannon Engineering, Culver City, California. Installed, maintained and serviced sound systems, surveillance and alarm systems. Apprentice Intercommunication and Sound Technician, Linde Electronics, Santa Fe Springs, California.

September 1968-January 1973

Receiving Clerk, Mattel Toymakers, Hawthorne, California. Maintain records of incoming parts and materials. Production Control Analyst, Insured materials were stocked for use on "Hot Wheel" and "Barbie Doll" production lines and monitored when material would be available.

EDUCATION

1977 - 1990	California State University at Long Beach, Long Beach, California. I received a BS Degree in Electrical Engineering, with a minor in Computer Science.
1974 - 1976	Los Angeles Trade Technical College. 43 semester units in intercommunication and sound, obtaining a Journeyman certification.
1968 - 1974	Compton Junior College, AS degree in Electronic Technology.

INTERESTS

I enjoy computers, evaluating and testing new software and firmware. I assist schools in my community to encourage children and young adults to stay in school. Through Southern California Edison, I continue to work in the Student and Employee Development program and Future Scientist and Engineers of America in partnership with SCE, I volunteer time in the Westminster school district encouraging students to become engineers or scientist. I support the local schools in my community by volunteering time as Bingo Captain, Caller or Seller. I have a mild appreciation for exotic cars such as Alfa Romeo's. Photography has been a pass time for many years and I enjoy it very much.

MILITARY SERVICE

January 1977 -	U.S. Army Reserves, Pasadena, California. Instructor of Automated
Present	Logistic System Course and Course Manager with six member team

August 1969- U.S. Arm July 1971

U.S. Army. Artillery Combat Leadership School, 32 weeks.

Tactical field communications chief; supervised seven soldiers operating ground communications in a company area in Viet Nam.

REFERENCE

Available upon request.

RICHARD R. LONG

Garden Grove, CA 92840

ELECTRICAL METERING/TESTING PROFESSIONAL

Productive Electric Utility technician with a proven record of accuracy, quality and safety. Broad range of experience includes residential, commercial and industrial customers/clients.

- Technical Metering
- Test Procedures
- Staff Development

- Labor Relations
- Budgeting
- Marketing

SELECTED ACCOMPLISHMENTS

Personnel Supervision

- Developed, interviewed and promoted, many technically skilled meter testmen.
- Resolved grievances as a Labor Relations representative at fact finding meetings resulting in significant dollar savings.
- Developed safety programs which maintained safe working environments and reduced industrial accidents.

Budget Management

- Successfully managed a \$2.5 million budget without exceeding targets.
- Developed spread sheets and graphic presentations which set the standard for divisional budget reporting.

Technical Writing

- Drafted complex technical test procedures for KWH and Reactive metering systems assuring consistency of methods, accuracy and safety.
- Wrote articles of common interest for Departmental and Company news publications.

Sales/Marketing

- Proposed and successfully marketed specialized metering services to third party customers which provided additional revenue.
- Provided graphic Load Profile data to customers, using selective software, that produced cost saving adjustments by satisfied customers.

RICHARD R. LONG

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WORK EXPERIENCE

1996 - Present: SELF EMPLOYEED, Independent Contracting.

1967 - 1995: SOUTHERN CALIFORNIA EDISON COMPANY, Fullerton, CA.

Account Executive (Energy Services Inc.)	1994 - 1995
Division Test Supervisor	1992 - 1995
Field Test Supervisor	1984 - 1992
Meter Test Supervisor	1980 - 1984
District Polyphase Testman	1970 - 1980
District Singlephase Testman	1967 - 1970

AWARDS

- Recognized for perfect attendance each year since 1990.
- Received one High Five and three Quality of Service awards since 1991.

TECHNICAL

Skilled in various PC software packages including:

Windows/Microsoft Office:

-MS Word

-Excel (including macros)

-Powerpoint

DOS

WordPerfect

Ouicken

Desk Top Publishing

EDUCATION

California State University - Fullerton, CA.: Completed courses towards B.S. - Computer Science. California State University - Long Beach, CA.: Completed courses towards B.S. - Industrial Technology Long Beach City College - Long Beach, CA.: A.A. - Industrial Technology (Electronics Option).

SUMMARY

A Metering Engineer with over 15 years experience in metering and energy related construction and measurement services. Has a thorough understanding of California's regulating bodies' requirements that apply to metering in the direct access environment. A strong communicator with substantial experience in training, producing training materials and conducting training sessions. Possesses an indepth knowledge of metering systems with a proven ability to identify meter and communications equipment failures and implement effective and timely response.

SYSTEM DESIGN SYSTEMS REVIEW DEVELOPING POLICY PROJECT MANAGEMENT NEGOTIATING TRAINING

EXPERIENCE MARCH 1998- PRESENT

<u>PG&E ENERGY SERVICES</u> San Francisco CA: A national energy service provider based in Northern California, focused on providing integrated energy solutions for commercial retail, processing and Industrial customers

Metering Engineer, Field Engineer: Manages the negotiation and development of MSP contracts; Designs, develops and provides training and coaching to MSPs on complex metering installations; Assess performance of MSPs: Produces field-ready documentation of work procedures and equipment

- Designed, developed and implemented a multi-site, first-of-its-kind, highly innovative supplementary electric metering system for a top tier national retail customer. On-time on-budget, with results meeting and or exceeding customer expectations. Utilizing a skill set not limited to negotiation, coaching, team building, designing and serving as a change agent
- As a team member I contributed to the Initial meter measurement program creation and documentation for ES. Worked to identify and document manufacturer defects in programming software and facilitate corrections.

NOVEMBER 93 -MARCH 98

PACIFIC GAS AND ELECTRIC COMPANY San Francisco CA: A regulated gas and electric utility based in Northern California, focused on the production, transportation and delivery of energy for a diverse customer base.

Gas and Electric Service Supervisor: Managed the daily activities of 11 journeyman employees providing gas and electric service and emergency response over a substantial portion of the San Joaquin Valley. While in this position i implemented a changed work schedule to better match workforce to workload resulting in a 25% reduction of non-emergency overtime.

Electric Distribution Supervisor: Directed the daily activities of 15 journeyman distribution operators overseeing electric energy delivery and emergency response over a substantial portion of the San Josquin Valley. Managed the pilot implementation of new electric outage response and communications tool. Designed the corresponding 200-page Emergency Response Manual for Stockton Division.

Electric Metering Supervisor: Directed the daily activities of 10 journeyman Electric Metering Technicians over a 5 county area in the San Joaquin Valley. Implemented process Improvements which yielded a 43% gain in the department's excellence rating (as measured through customer response) pertaining to the company's Energy Cost inquiry process.

EDUCATION

Saint Mary's College, Moraga, CA B.A., Liberal Arts; Graduate Courses in Education

STATE CERTIFICATION

State of California certifled Journeyman Meterman

JOHN M. WESTBERG

METERING BUSINESS ANALYST

Innovative analyst with a proven record of success in the development of Automation Projects which increase productivity. Specific skills include:

- Analysis
- Requirements
- Design

- Team Building
- Leadership
- Communication

EXPERIENCE

IBM GLOBAL SERVICES, San Francisco CA

(Contracting to Pacific Gas & Electric Co.)

Meter Management Business Analyst

(Feb. 1997 - Apr. 1997)

Developed Functional Specifications for new Meter Management System.

SOUTHERN CALIFORNIA EDISON CO., Rosemead, CA.

(An Electric Utility serving Southern California)

Computing Operations Specialist, Electrical Metering Srvs. (1995 - 1996)
Managed a \$1.5 million proprietary automated system development project to replace paper processes and inefficiencies. Designed a three platform system comprised of Mainframe (CICS/DB2), Workstations (Windows 3.11), laptops (DOS 6.0), and associated interfaces.

- Increased productivity 13% through design of new systems.
- Developed requirements, implementation plan, and formed internal team which minimized cost overruns.
- Built relationships with internal and external clients that aided development and insured product satisfaction.
- Motivated team members to expand education for project requirements and personal development.

Management Analyst, Westminster, CA

(1993 - 1995)

Analyzed business structure / processes and presented recommendations for automation. Upgraded department data base to mainframe system.

- Saved over \$80,000 through research, development and execution of automation projects.
- Designed screens for customer service mainframe system.
- Championed launch of mainframe system which opened data to internal clients.

SOUTHERN CALIFORNIA EDISON CO, continued

Meter Test Supervisor, Long Beach, CA (1992 - 1993) Supervised 10 Field Meter Testpersons. Coordinated new project installations and result surveys. Trained personnel for classification certifications. Counseled staff and performed annual reviews.

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Meter Test Analyst, Long Beach, CA (1989 - 1991)
Certified accuracy of paper documentation relating to meter accuracy verification and billing errors for 55 field testpersons. Trained personnel in accurate documentation methodology.

Meter Testman, Long Beach, CA (1979 - 1989) Certified accuracy of electric meters in the field. Resolved billing issues with industrial, commercial, and residential customers.

Maintenance Machinist, El Segundo, CA (1968 - 1978)
Maintained and repaired steam plant generating equipment.

EDUCATION

Long Beach City College: 38 units towards degree in Business Management.

TECHNICAL

Computer literate (MS Word, EXCEL, Powerpoint, Project, Windows 3.11 and Windows 95). Experienced in PC repair, communications systems, bulletin board systems and electrical service installation/repair.

PERSONAL

Volunteer for Special Olympics and City of Lakewood.

Scoutmaster / Assistant for six years leading a troop of 35.

Soccer Coach / Referee for six years.

Inflight Refueling Specialist for four years with U.S.A.F..

Personal interests include: financial markets, fishing, off road vehicles, camping, biking, computers, and reading.